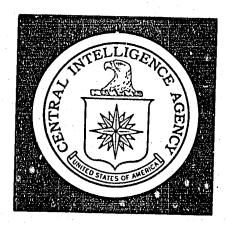
첫, 과자, 상한하다는 경험하는 동안 화면 화면 하고 있는 사람들은 전에 들어 있다. 기사, 기사, 기사는 사람들은 사람들은 제대를 받았다. 그는 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은
Declassified in Part - 25x1
Sanitized Copy Approved for
Release 2011/10/31:
CIA-RDP85T00875R00160003
Declassified in Part -
Sanitized Copy Approved for
Release 2011/10/31:
CIA-RDP85T00875R00160003

Declassified in Part - Sanitized Copy Approved for Release 2011/10/31: CIA-RDP85T00875R001600030066-6

Secret

25X1



DIRECTORATE OF INTELLIGENCE

Intelligence Memorandum

Petroleum Situation In Cambodia

Secret_

ER IM 70-66 May 1970

Copy No. 59

Declassified in Part - Sanitized Copy Approved for Release 2011/10/31: CIA-RDP85T00875R001600030066-6

WARNING

This document contains information affecting the national defense of the United States, within the meaning of Title 18, sections 793 and 794, of the US Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law.

GROUP 1 Excluded from automotic downgrading and declassification

25X1

CENTRAL INTELLIGENCE AGENCY Directorate of Intelligence May 1970

INTELLIGENCE MEMORANDUM

Pétroleum Situation in Cambodia

Introduction

Military action in Cambodia has partly cut off Phnom Penh, the main petroleum-consuming area of the country, from its regular sources of petroleum supply. This memorandum examines recent developments and discusses alternative supply routes.

Disruption of Petroleum Supplies

1. The normal pattern of petroleum supply and distribution in Cambodia has been seriously interrupted in recent weeks. Merchant ships have not sailed to Phnom Penh since 25 April, and the country's only refinery at Kompong Som (formerly Sihanoukville) reportedly ceased operations on 6 May. The refinery apparently was forced to close because all of its petroleum product storage capacity (42,000 tons) was filled. Products could not be moved in normal amounts from the refinery as a result of the interdiction of rail and road routes to Phnom Penh. Route 3 and the rail line reportedly are closed (see the map), and traffic on Route 4, the only other all-weather road between Kompong Som and Phnom Penh, has been subjected to occasional harassment by small arms fire. There

Note: This memorandum was produced solely by CIA. It was prepared by the Office of Economic Research and was coordinated with the Office of Current Intelligence and the Director's Special Assistant for Vietnamese Affairs.

25X1

are reports that truck convoys under military escort have successfully made the trip to Phnom Penh via Route 4, but no regular flow of supplies has been established in this manner.

2. Under normal conditions, Cambodia consumes some 280,000 tons of petroleum products a year (see Table 1). About 90% of these supplies originate from the refinery at Kompong Som on the Gulf of Siam. The remainder is shipped from foreign sources to Phnom Penh via the Mekong River.

Current Supplies

3. The refinery at Kompong Som at the end of April probably had sufficient crude oil on hand for 40 to 60 days of operation and enough products in storage to satisfy Cambodia's requirements for 30 to 40 days. Storage facilities in the Phnom Penh area, where about 75% of Cambodia's total consumption is concentrated, probably were filled to only about 75% of capacity at the end of April, which represents a 30-day supply at normal consumption rates. Other areas of the country may have had comparable supplies on hand (see Table 2).

Consumption Patterns and Probable Shortages

- 4. For the country as a whole, the transportation sector consumes about 35% of petroleum supplies, the electric power industry accounts for another 35%, and households and light industry make up the remaining 30%. The share of petroleum consumed by the electric power industry probably is higher in the Phnom Penh area where as much as 90% of the country's total power is generated.
- 5. Supplies of petroleum for vehicles can be stretched by rationing, and fuel for power stations can be conserved by curtailing nonessential use of electricity. Military requirements as a whole are not large -- less than 4% of total consumption in 1969 -- and additional supplies for the military forces can be drawn from the civil sector. Although Phnom Penh would be hardest hit by a curtailment of electric power service, a small flow can be maintained from the country's only hydroelectric station at Kirirom, 65

miles southwest of Phnom Penh. This station generates about 10% of Cambodia's requirements, and a high-voltage transmission line connects the station to Phnom Penh.

6. A power shortage in the Phnom Penh area would affect the major part of Cambodia's small industrial sector, particularly plants for the production of textiles and the processing of metals and foods. It would also affect the only plants producing plywood, tires, chemicals, glassware, and batteries as well as the major sources of building materials, bottled beverages, and clothing. Electric power is of only minor importance in other parts of the country, where subsistence agriculture predominates.

Alternative Supply Routes

- 7. Cambodia's internal petroleum supply probably could be maintained if any of the three existing routes -- by road or rail from Kompong Som or by water via the Mekong River -- could be kept open. If they remain closed, the two highways and the railroad from Thailand offer an alternative supply route. This involves distances of 150 miles from the Bangkok area to Poipet on the Thai border and 230 miles from Poipet to Phnom Penh. The rail line is in poor condition at the border but reportedly could be restored in about a week. Other sections of the line in Thailand and Cambodia are believed to be operational.
- 8. In addition to the problems of organizing such a supply operation, the use of the rail line from Thailand would present several physical difficulties. Some Cambodian and Thai tank cars are not compatible, because of differences in draft gear and clearances. This would necessitate transloading at the border. Cambodia's 40 tank cars would be adequate to handle the movement of the required fuel over the rail route from the Thai border, but some of the cars probably are at the Kompong Som refinery and would not be available. Thailand reportedly has a large enough inventory of tank cars to accommodate the movement of petroleum from Bangkok to the border, but additional supplies of petroleum would have to be imported to meet Cambodia's requirements.

9. Road routes from Thailand to Phnom Penh -Route 5, which roughly parallels the rail route, and
Route 6 further north -- offer a more costly alternative to the rail route. Some 400 tank trucks would
be required within Cambodia for the road routes, twice
the number reported to be available. Even if the necessary transportation equipment and facilities could
be organized for the overland movement of petroleum
from Thailand, rail and road routes could be interdicted.

Conclusions

- 10. The interdiction of petroleum supply routes in Cambodia threatens to produce serious shortages of fuel for transportation and electric power. Probably no more than a 30-day supply was available in most areas of the country at the end of April. Rationing should extend these supplies for a longer period, but shortages of some products and in some areas of the country are likely to appear soon. Phnom Penh would be hard hit by an oil shortage, but in other parts of the country where subsistence agriculture predominates the effect would be minimal. Despite their burgeoning petroleum requirements, the military forces, which normally account for only 4% of total consumption, could be supplied by drawing on existing supplies or by an occasional emergency lift.
- 11. If normal supply routes to Phnom Penh remain closed, petroleum could be moved by way of road and rail connections with Thailand. Organizing this supply operation would require repair of the rail line, redeployment of the limited tank car and truck park, and arranging for the purchase of petroleum from Thailand and its transport to the border. In view of the current dislocations in the military and civilian sectors of Cambodia, this would be a formidable task and could take a matter of weeks. Furthermore, the routes from the Thai border to Phnom Penh could be easily interdicted.

Table 1
Cambodia: Petroleum Consumption a/
1969

	Metric Tons				
Product	Civil	Government	Military	_Total	Percent of Total
Aviation gasoline	1,870	0	1,530	3,400	1.2
Jet fuel	11,500	0	800	12,300	4.4
Motor gasoline	28,450	4,550	2,950	35,950	12.8
Kerosine	20,720	120	10	20,850	7.4
Gas oil	27,020	13,020	3,920	43,960	15.7
Diesel fuel oil	95,950	2,500	Negl.	98,450	35.1
Industrial fuel oil	49,860	120	950	50,930	18.2
Lubricants	9,850	1,000	150	11,000	3.9
Other .	3,400	0	. 0	3,400	1.2
Total	248,620	21,310	10,310	280,240	100.0
	Percent of Total				
	88.7	7.6	3.7	100.0	

a. Because of rounding, components may not add to the totals shown.

Table 2

Cambodia: Principal Bulk Oil Storage Terminals 1 January 1970

	Metric Tons
Petroleum products	73,680
Phnom Penh	23,600
Shell Esso Caltex Other	12,000 8,700 1,500 1,400
Kratie (Fark)	3,800
Prek Phnou (Fark)	1,900
Tonlobet	1,800
Esso Shell	1,000
Chhlong paper mill	255
Prek Kak plantations	130
Battambang powerplant	115
Kompong Cham textile plant	80
Kompong Som refinery	42,000
Crude oil	70,000
Kompong Som refinery	70,000

